AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS

1-73. (Cancelled)

74. (Currently Amended) A method for predictively responding to a network management data request, the method comprising:

receiving a first network management data request;

determining if said first network management data request matches a pattern of request defined and stored in advance in a memory, the pattern including one or more expected management data requests;

determining if data responsive to said first network management data request is contained in a cache of prefetched network management data if said first network management data request matches a pattern defined in said memory;

sending a response including said data responsive to said first network management data request, if said data responsive to said first network management data request is contained in said cache and if said first network management data request matches a pattern defined in said memory; and

collecting, if said first network management data request matches a pattern defined in said memory, data responsive to any remaining network management data requests in the matched pattern.

75. (Previously Presented) The method of claim 74, further comprising:

transmitting said first network management data request to a network management data core to respond to said first network management data request if said first network management data request does not match a pattern defined in said memory.

76. (Cancelled)

77. (Previously Presented) The method of claim 74, wherein said pattern further comprises a periodicity of the network management data requests contained in said pattern.

78. (Previously Presented) The method of claim 106, wherein said initiating includes initiating periodic data collections at a rate matching a periodicity of the network management data requests contained in said pattern.

79. (Previously Presented) The method of claim 74, wherein said network management data request is a Simple Network Management Protocol (SNMP) request.

80. (Currently Amended) The method of claim 74, wherein said determining if a first network management request matches a pattern of request based on at least one of:

a community string;

a network management system IP address; or ~~and~~

a network management system port number.

81. (Cancelled)

82. (Currently Amended) An apparatus for predictively responding to a network management data request, the apparatus comprising:

a storage memory adapted to define and store in advance at least one pattern of request, the pattern of request including one or more expected network management data requests;

a cache memory adapted to store prefetched network management data;

a request classifier configured to determine if a first network management data request matches a pattern defined in said storage memory and further configured to determine if data responsive to said first network management data request is contained in said cache memory if said first network management data request matches a pattern defined in said memory;

a sender coupled to said request classifier configured to send a response including said data responsive to said first network management data request, if said data responsive to said first network management data request is contained in said cache memory and if said network management data request matches a pattern defined in said storage memory; and

a lookahead processor coupled to said request classifier configured to collect, if said first network management data request matches a pattern defined in said storage memory, data responsive to any remaining network management data requests in the matched pattern.

83. (Previously Presented) The apparatus of claim 82, further comprising:

an interface coupled to said request classifier configured to transmit said first network management data request to a network management data core to respond to said first network management data request if said first network management data request does not match a pattern defined in said storage memory.

84. (Cancelled)

85. (Previously Presented) The apparatus of claim 82, wherein said pattern further comprises a periodicity of the network management data requests contained in said pattern.

86. (Previously Presented) The apparatus of claim 106, wherein said lookahead processor is further configured to initiate periodic data collections at a rate matching a periodicity of the network management data requests contained in said pattern.

87. (Previously Presented) The apparatus of claim 82, wherein said network management data request is a Simple Network Management Protocol (SNMP) request.

88. (Currently Amended) The apparatus of claim 82, wherein said request classifier uses, in determining if a first network management data request matches a pattern, at least one of:

a community string;

a network management system IP address; or ~~and~~

a network management system port number.

89. (Cancelled)

90. (Currently Amended) An apparatus for predictively responding to network management data requests, the apparatus comprising:

a storage memory adapted to define and store in advance a pattern of request, the pattern including one or more expected network management data requests;

a cache memory adapted to store prefetched network management data [prefetched from at least one subsystem on a managed network device];

means for determining if a first network management data request contains a pattern defined in said storage ~~a~~ memory;

means for determining if data responsive to said first network management data request is contained in said cache memory if said first network management data request contains a pattern defined in said storage memory;

means for sending a response including data responsive to said first network management data request if said data responsive to said first network management data request is contained in said cache memory and if said first network management data request matches a pattern defined in said storage memory; and

means for collecting, if said first network management data request matches a pattern defined in said storage memory, data responsive to any remaining network management data requests in the matched pattern.

91. (Previously Presented) The apparatus of claim 90, further comprising:

means for transmitting said first network management data request to a network management data core to respond to said first network management data request if said first network management data request does not match a pattern defined in said storage memory.

92. (Cancelled)

93. (Previously Presented) The apparatus of claim 90, wherein said pattern further comprises a periodicity of network management data requests contained in said pattern.

94. (Previously Presented) The apparatus of claim 108, wherein said means for initiating includes means for initiating periodic data collections at a rate matching said periodicity of network management data requests contained in said pattern.

95. (Previously Presented) The apparatus of claim 90, wherein said network management data request is a Simple Network Management Protocol (SNMP) request.

96. (Currently Amended) The apparatus of claim 90, wherein said means for determining if a first network management data request matches a pattern uses at least one of:

a community string;

a network management system IP address; or ~~and~~

a network management system port number.

97. (Cancelled)

98. (Currently Amended) A program storage device, readable by a machine, embodying a program of instructions executable by the machine to perform a method for predictively responding to a network management data request, the method comprising:

receiving a first network management data request;

determining if said first network management data request matches a pattern of request defined and stored in advance in a memory, the pattern including one or more expected management data requests;

determining if data responsive to said first network management data request is contained in a cache of prefetched network management data if said first network management data request matches a pattern defined in said memory;

sending a response including said data responsive to said first network management data request, if said data responsive to said first network management data request is contained in said cache and if said first network management data request matches a pattern defined in said memory; and

collecting, if said first network management data request matches a pattern defined in said memory, data responsive to any remaining network management data requests in the matched pattern.

99. (Previously Presented) The program storage device of claim 98, wherein the method further comprises:

transmitting said first network management data request to a network management data core to respond to said first network management data request if said first network management data request does not match a pattern defined in said memory.

100. (Cancelled)

101. (Previously Presented) The program storage device of claim 98, wherein said pattern further comprises a periodicity of the network management data requests contained in said pattern.

102. (Previously Presented) The program storage device of claim 109, wherein said initiating includes initiating periodic data collections at a rate matching a periodicity of the network management data requests contained in said pattern.

103. (Previously Presented) The program storage device of claim 98, wherein said network management data request is a Simple Network Management Protocol (SNMP) request.

104. (Currently Amended) The program storage device of claim 98, wherein said determining if a first network management request matches a pattern of request based on at least one of:

a community string;

a network management system IP address; or ~~and~~

a network management system port number.

105. (Cancelled)

106. (Previously Presented) The method of claim 74, further comprising:

if said first network management data request matches a pattern defined in said memory, but data responsive to said first network management data request is not contained in said cache, initiating periodic data collections for data responsive to network management data requests in said pattern.

107. (Previously Presented) The apparatus of claim 82, wherein said lookahead processor is further configured to initiate periodic data collections for data responsive to the network management data requests in said pattern, if said first network management data request matches a pattern defined in said memory, but data responsive to said first network management data request is not contained in said cache.

108. (Previously Presented) The apparatus of claim 90, further comprising:

means for initiating periodic data collections for data responsive to network management data requests in said pattern, if said first network management data request matches a pattern defined in said storage memory, but data responsive to said first network management data request is not contained in said cache memory.

109. (Previously Presented) The program storage device of claim 98, wherein said method further comprises:

if said first network management data request matches a pattern defined in said memory, but data responsive to said first network management data request is not contained in said cache, initiating periodic data collections for data responsive to network management data requests in said pattern.